A new geryonid crab from the Amirante Basin, western Indian Ocean (Crustacea: Decapoda: Brachyura)

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Abstract.—Two deep water geryonid crabs, Chaceon crosnieri Manning & Holthuis, and C. goreni, a new species, are reported from the Amirante Basin. Chaceon goreni, the seventh species of the genus to be recognized from the western Indian Ocean, is described from material collected in 1400 m off Alphonse Island. It most closely resembles C. collettei Manning, in having a spine externally on the carpus of the cheliped; but it is distinguished in having longer, more slender frontal and anterolateral spines, and proportionately longer, more slender pereopods.

Six species of the deep water geryonid genus Chaceon Manning & Holthuis, 1989 have been described from the western Indian Ocean thus far. Chaceon paulensis (Chun, 1903) is known from Amsterdam and St. Paul Islands, and C. collettei Manning, 1992 from Walters Shoals, both in the southernmost reaches of the Indian Ocean; C. macphersoni (Manning & Holthuis, 1988) was collected off South Africa, Mozambique and Madagascar, C. crosnieri Manning & Holthuis, 1989 off Madagascar, C. alcocki Ghosh & Manning, 1993 was found off Travancore, India, and C. somaliensis Manning, 1993 off Somalia. Recently, several geryonid crabs were collected by an ichthyological expedition to the Amirante Basin. The specimens, here identified as belonging to C. crosnieri and a new species, described here, constitute the first geryonid records for the islands.

The type specimens are deposited in the National Museum of Natural History, Smithsonian Institution, Washington D.C. (USNM), and in the National Collections, Tel Aviv University (TAU). The following abbreviations are used: cl, carapace length, measured on the midline; coll, collector; ovig, ovigerous; mm, millimeters.

Chaceon crosnieri Manning & Holthuis, 1989 Fig. 1

Material examined.—Indian Ocean: Amirante Basin, Alphonse I., 1000 m, trammel net 100 m, 20 Dec 1998, coll M. Goren: 1 δ 102.6 mm, 1 \circ 107.3 mm, USNM 307241; 5 δ δ 74.8–123.5 mm, 2 \circ \circ 98.8, 102.4 mm, 6 \circ \circ ovig 90.6–123.2 mm, TAU AR 27778. Between Alphonse and Bijoutier Is., 1400 m, trammel net 100 m, 17 Dec 1998, coll M. Goren: 1 δ 134.3 mm, TAU AR 27779.

Chaceon goreni, new species Figs. 2, 3

Material examined.—Indian Ocean: Amirante Basin, Between Alphonse and Bijoutier Is., 1400 m, trammel net 100 m, 17 Dec 1998, coll M. Goren: 1 & 86.3 mm, holotype, TAU AR 27780; 1 & 80.0 mm, paratype, USNM 309740.

Description.—Carapace transversely ovate, 1.15–1.20 times as wide as long; sur-

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Fig. 1. Chaceon crosnieri Manning & Holthuis, 1989, male, cl 134.3 mm, dorsal view, TAU AR 27779.





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Fig. 3. *Chaceon goreni*, new species, male holotype, cl 86.3 mm, TAU AR 27780. a, front; b, ventral view of orbit; c, male first pleopod; d, apex of male first pleopod; e, male second pleopod.

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face pitted; gastric region inflated; branchial regions well demarcated, slightly swollen, rugose. Front quadridentate, frontal teeth acuminate, elongate, submedian teeth extending further forward than lateral teeth; distance between submedian teeth smaller than distance between submedian and lateral teeth. Supraorbital margin obscurely granulate, submedially fissured; infraorbital margin medially granulate, inner angle bearing elongate, acuminate spine, extending beyond apices of lateral frontal teeth. Anterolateral margin convex, with 5 equidistant prominent spines. Posterolateral margin indistinctly convex. Posterior margin subcristate, sinuous, medially concave. Merus of third maxilliped subquadrate; external angle rounded. Ischium subrectangular, with oblique sulcus submedially. Exopod columnar, triangular denticle distally on inner margin. Chelipeds robust, subequal. Cheliped merus bearing prominent subdistal and distal spines on upper margin, Carpus with conical granules dorsally, with prominent spine on outer margin, another present on inner margin. Outer surface of palm rugose, granulose, granules more prominent on upper margin. Fingers longer than palm, cutting edges of fingers of larger chela with molariform teeth proximally. Pereopods long, slender, laterally compressed; fifth pereopodal merus nearly 6 times as long as wide, 0.75 times as long as carapace. Pereopodal meri, carpi, dorsally spinulose, spinules larger distally; pereopodal propodi dorsally spinulose, spinules smaller distally. Posterior 3 pereopodal meri bearing spine distally on upper margin. Dactyli laterally compressed, bearing longitudinal groove on upper margin. Surface of thoracic sternum pitted. Male abdomen triangular, telson broadly triangular, anteriorly rounded. Male first pleopod stout, tapering distally, curved distad; subdistally spinulose. Male second pleopod nearly as long as first, filiform, digitate process subdistally on inner margin.

Color.—Carapace pale brown, legs pink-ish-orange.

Etymology.—Named for Dr. Menachem Goren, who collected the crabs, savoured some, but preserved most for the benefit of science.

Remarks.-Chaceon goreni is the seventh species of the genus described from the western Indian Ocean. It differs from the other species in the region, viz. from C. alcocki Ghosh & Manning, 1993, C. crosnieri Manning & Holthuis, 1989, C. macphersoni (Manning & Holthuis, 1988), C. paulensis (Chun, 1903), and C. somaliensis Manning, 1993, in having a spine on the outer margin of the carpus of the cheliped. Chaceon goreni resembles C. collettei Manning, 1992 from Walters Shoals at the southwestern Indian Ocean, but differs in having longer, more slender frontal and anterolateral spines, as well as longer and proportionately more slender percopods. In the males of Chaceon collettei the fifth pereopodal merus is 4.9-5.2 times as long as wide, whereas in C. goreni it is nearly six times as long as wide. Fifth pereopodal dactylus 0.83 times as long as propodus in C. collettei, 0.92 times as long as propodus in C. goreni.

The haul off Alphonse Island yielded nearly one hundred *Chaceon* crabs, most were served for dinner to the gustatory gratification of the ichthyologists.

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